PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
15009pc1		
International application No.	International filing date *(day/month/year)*	(Earliest) Priority Date *(day/month/year)*
PCT/DK2004/000494	09/07/2004	14/07/2003
Applicant		
STATENS SERUM INSTITUT		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

[X] It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**

   a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

   [ ] The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

   b. [X] With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. [ ] **Certain claims were found unsearchable** (See Box II).

3. [ ] **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

   [X] the text is approved as submitted by the applicant.

   [ ] the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

   [X] the text is approved as submitted by the applicant.

   [ ] the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the **drawings**,

   a. the figure of the **drawings** to be published with the abstract is Figure No. _____

      [ ] as suggested by the applicant.

      [ ] as selected by this Authority, because the applicant failed to suggest a figure.

      [ ] as selected by this Authority, because this figure better characterizes the invention.

   b. [X] none of the figures is to be published with the abstract.

Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:

   a. type of material

   [X] a sequence listing

   [ ] table(s) related to the sequence listing

   b. format of material

   [X] in written format

   [X] in computer readable form

   c. time of filing/furnishing

   [ ] contained in the international application as filed

   [ ] filed together with the international application in computer readable form

   [X] furnished subsequently to this Authority for the purpose of search

2. [X] In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

3. Additional comments:

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, BIOSIS, PAJ, EMBL, WPI Data, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 556 504 A (SHIMADZU CORP) 25 August 1993 (1993-08-25) *seq id 11 ; seq id 19 , seq id 18*	25-28
X	WO 01/94634 A (BIOPOOL INT INC) 13 December 2001 (2001-12-13) *slt1*	25,26
X	WO 02/36827 A (AUSUBEL FREDERICK M ; GEN HOSPITAL CORP (US); KUDVA INDIRA (US); CALDE) 10 May 2002 (2002-05-10) *seq id no 20*	25,26
X	JP 2003 164282 A (RAKAN:KK; GIFU UNIV) 10 June 2003 (2003-06-10) *probe seq id 176; probe seq 178 *	25-28

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[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

° Special categories of cited documents :

'A' document defining the general state of the art which is not considered to be of particular relevance
'E' earlier document but published on or after the international filing date
'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
'O' document referring to an oral disclosure, use, exhibition or other means
'P' document published prior to the international filing date but later than the priority date claimed

'T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
'Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
'&' document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
11 November 2004	07/12/2004

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Cornelis, K

Form PCT/ISA/210 (second sheet) (January 2004)

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/010332 A (SCHINKINGER MANFRED ; VOLLENHOFER-SCHRUMPF SABINE (AT); FRAENZL GERT () 6 February 2003 (2003-02-06) *seq id 7*	25,26
X	WO 95/29261 A (UNIV HAWAII) 2 November 1995 (1995-11-02) *seq id 6*	25,26
X	WO 01/48237 A (HOEFT ANDREAS ; STUEBER FRANK (DE)) 5 July 2001 (2001-07-05) *oligonucleotide sknI*	25,26
X	WO 99/63112 A (FRASER MARK S ; HUNT WESSON INC (US); ROMICK THOMAS L (US)) 9 December 1999 (1999-12-09) *seq 27*	27,28
X	WO 92/17609 A (HOLMES MICHAEL JOHN ; DYNAL AS (NO)) 15 October 1992 (1992-10-15) *primer 4*	27,28
X	WO 00/61720 A (NERENBERG MICHAEL I ; EDMAN CARL F (US); METHA PRESHANT P (US); NANOGE) 19 October 2000 (2000-10-19) *seq id 45*	27,28
X	DE 101 23 183 A (BECTON DICKINSON CO) 22 November 2001 (2001-11-22) *seq id 36*	27,28
X	WO 02/053771 A (BIOTECON) 11 July 2002 (2002-07-11) *seq id 24,25,39,82*	25-28
X	WO 00/29618 A (UNIVERISTY OF VIRGINIA PATENT FOUNDATION) 25 May 2000 (2000-05-25) *seq id 1*	27,28
Y	RICH CHANTAL ET AL: "Identification of human enterovirulent Escherichia coli strains by multiplex PCR" JOURNAL OF CLINICAL LABORATORY ANALYSIS, vol. 15, no. 2, 2001, pages 100-103, XP008038376 ISSN: 0887-8013 the whole document	1-38

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	PATON A W ET AL: "Direct detection and characterization of shiga toxigenic Escherichia coli by multiplex PCR for stx1, stx2, eae, ehxA, and saa" JOURNAL OF CLINICAL MICROBIOLOGY 2002 UNITED STATES, vol. 40, no. 1, 2002, pages 271-274, XP002304663 ISSN: 0095-1137 the whole document	1-38
A	WO 01/46477 A (CONAGRA GROCERY PRODUCTS COMPA) 28 June 2001 (2001-06-28) page 20; figure 4	1-38
A	TOMA C ET AL: "Multiplex PCR assay for identification of human diarrheagenic Escherichia coli" JOURNAL OF CLINICAL MICROBIOLOGY 01 JUN 2003 UNITED STATES, vol. 41, no. 6, 1 June 2003 (2003-06-01), pages 2669-2671, XP002304664 ISSN: 0095-1137 the whole document	1-38
A	LOPEZ-SAUCEDO CATALINA ET AL: "Single multiplex polymerase chain reaction to detect diverse loci associated with diarrheagenic Escherichia coli." EMERGING INFECTIOUS DISEASES, vol. 9, no. 1, January 2003 (2003-01), pages 127-131, XP002305114 ISSN: 1080-6040 cited in the application the whole document	1-38
A	PASS M A ET AL: "Multiplex PCRs for identification of Escherichia coli virulence genes" JOURNAL OF CLINICAL MICROBIOLOGY, vol. 38, no. 5, May 2000 (2000-05), pages 2001-2004, XP002305115 ISSN: 0095-1137 cited in the application the whole document	1-39

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